

# Citrus Industry

Vol. 26 — No. 4

APRIL, 1945

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## FLORIDA CITRUS MEN SEEK EXPORT BUSINESS

Acting as temporary chairman of the United States Horticultural Council, Marvin H. Walker, Secretary-Manager of the Florida Citrus Producers Trade Association, is now in Texas for conference with citrus men there and will proceed to California to confer with California and Arizona citrus interests. The purpose of his visit is to promote an organization for the encouragement of postwar export business in the citrus field.

Lorin T. Bice, general manager of the Lake Hamilton Cooperative, has accepted the chairmanship of a committee designed to assure the state's fruit and other agricultural products a place in the postwar export field. Known as the Florida Citrus Committee of the United States Horticultural Council, the group is made up of representatives of the industry.

Along with Bice on the Florida committee are such citrus leaders as Al Connelly, Carrol E. Lindsay, C. Rouss May, C. C. Rathbun, R. A. Fender and Marvin H. Walker.

It is felt by members of the committee that exports will be extremely important in the postwar era, and Florida citrus with its huge increase in production will need a part of the business.

The national organization will work with the United States Department of Agriculture and other Federal and foreign agencies in promoting exports of citrus and other fruits and vegetables.

## PROPOSED INCREASED TAX FOR ADVERTISING

A proposal to increase the tax on oranges from one cent to two cents per box for advertising purposes has been formally approved by four groups of citrus growers and shippers representing between eighty and ninety percent of the industry in the state.

The Florida legislature at its forthcoming session will be asked to enact such a measure. Should the higher tax be approved by the legislature, it would make available for advertising approximately one million dollars per year, or double the sum now available for this purpose.

The recommendation was contained in a report on approved legislative changes by

Charles H. Walker of Bartow, president of the Florida Citrus Exchange, serving as chairman of a joint committee representing the four groups — the Florida Farm Bureau Federation, Florida Cannery Association, United Growers and Shippers Association and the Florida Citrus Producers Trade Association.

The committee, recognizing the need for increased sales promotion activity when present wartime conditions give way to anticipated lower incomes in peacetime and the withdrawal or curtailment of government purchases for the armed forces and for lend-lease program, are taking time by the forelock and looking to the future.

Recognizing the benefits to the industry from the advertising campaign carried on in recent years by the Florida Citrus Commission, and believing that these benefits can be maintained in peacetime only by increased advertising, the legislative committee will strongly impress this idea upon the members of the legislature.

With constantly increasing production, not only in Florida but in all citrus producing areas, the need for increased sales activity is apparent. A half-million-dollar advertising appropriation has done much for Florida citrus producers; under peacetime conditions a million dollar appropriation will be needed if the increased production is to be marketed at a profit to the growers.

## BANNER YEAR FOR FLORIDA CITRUS

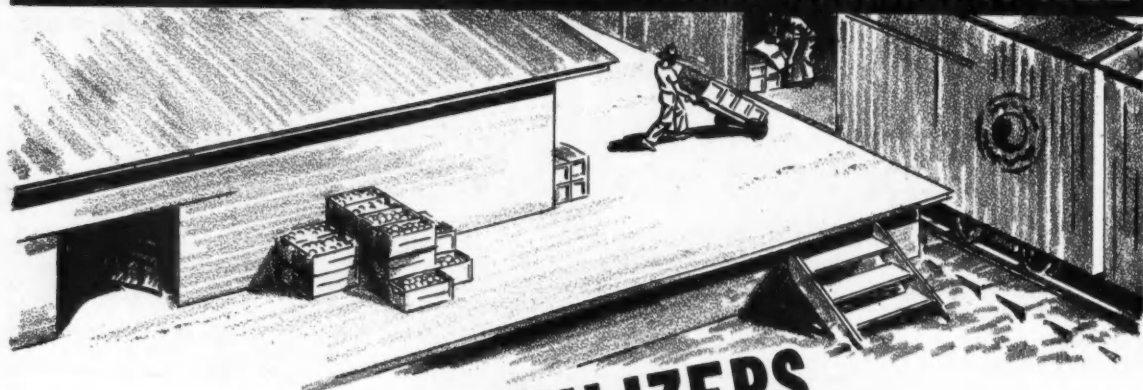
The year 1944 established a record income for Florida citrus growers according to J. C. Townsend, jr., of the Federal Bureau of Agricultural Economics. Growers of Florida citrus fruits realized an income of \$155,995,000 for the year ending December 31, the highest money value ever received by the industry.

While there was a drop in the income from truck crops and livestock and livestock products, the total income from Florida farm products increased five percent in 1944 over the income for 1943, due to the great increase in citrus income. The total income for all farm products was placed at \$323,278,000, of which citrus accounted for nearly one-half.

Income from livestock and livestock products declined 2.3 percent from the previous year; income from truck crops was down five

(Continued on page 22)

**America Needs ENOUGH Citrus Fruits For ALL**



## **Let IDEAL FERTILIZERS Help You Do Your Share To Fill The Need . . .**

- Increasing demand by our Armed Forces and civilian population for vitamin-rich, delicious citrus fruits and vegetables calls for increased production so there will be enough for all.
- Mere quantity is not sufficient. There must be high quality as well. Your summer application of citrus fertilizer will be a determining factor in quality. Make sure of quality by using IDEAL Fertilizers.
- For more than 50 years Florida growers have depended on the perfectly balanced formulas of IDEAL Brands to keep their trees in good health, to set large crops, and, when the summer application is made, to round out the crop for highest quality . . . and to assure the greater profits that high quality demands.
- Plan now to use IDEAL Brands for your summer application. And be sure you place your order early to help avoid possible disappointments that might be caused by labor and transportation problems.

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Combine your IDEAL fertilizer program with highly effective IDEAL and FASCO insecticides and fungicides.



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FERTILIZERS**

**WILSON & TOOMER  
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JACKSONVILLE - FLORIDA**



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## Income From And Value Of Florida Citrus Groves

For the past three seasons citrus fruit prices have been high and the production of fruit per acre has been good, resulting in high income per acre. The cost of production of this fruit increased but not so fast as did income. The per acre net returns above operating costs more than tripled from the 1941-42 to the 1943-44 season on groves that averaged more than 10 years of age on which the Florida Agricultural Extension Service obtained records in its citrus cost of production study.<sup>1/</sup>

This increase in returns from citrus together with pent up buying power accumulated under war-time conditions has resulted in sharp increases in citrus grove prices. If the present rate of returns could be maintained over a period of years, high grove prices would be justified. The preliminary figures for the net returns above operating costs were \$432.69 per acre in the 1943-44 season. (See Table I). If an ample sum were designated as management income, there would still be sufficient returns for a good rate of interest on a high grove valuation. For example, if \$5.00 per acre per month were designated as management income the returns on the

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EXTENSION AGRICULTURAL  
ECONOMIST

investment would be \$372.69 per acre. Capitalizing this figure at 6 percent interest the grove valuation would be \$6212 per acre.

groves, in which one-third of the trees were grapefruit, and the price received for fruit was \$1.71 per box. This production was 77 percent more than the 13 year average and the price was 86 percent higher. The net returns of \$432.69 per acre for management and interest on the investment during this one season, 1943-44, were 8 percent more than the total net returns per

TABLE 1. — THE SUMMARY OF COSTS AND RETURNS PER ACRE AND PER BOX FOR FLORIDA CITRUS GROVES AVERAGING OVER TEN YEARS OF AGE.

	13-yr. average 1931-44		1-yr. average 1931-44	
Number of grove reports	221		244	
Total acres of groves	7517		8477	
Acres per grove	34		35	
Average age	19		23	
Trees per acre	60		61	
Percent trees grapefruit	32		32	
Boxes harvested per acre	174		3081/	
	Costs per acre	Costs per box	Costs per acre	Costs per box
Labor, power, equipment	\$ 24.76	.14	\$ 36.81	.12
Fertilizer & amendments	25.12	.15	40.71	.13
Spray & dust materials	4.65	.03	6.60	.02
State & county taxes	5.35	.03	4.69	.02
Miscellaneous	2.25	.01	4.71	.02
Total operating costs	62.13	.36	93.52	.31
Returns from fruit	160.24	.92	526.211/	1.711/
Net returns	98.11	.56	432.69	1.40

1- Boxes harvested and data on returns based on 173 groves representing 6974 acres.

1/ See table on page 9, February 1945 issue of The Citrus Industry and Chart I of this article.

The preliminary figures for the 1943-44 season show 308 boxes of fruit harvested per acre on these groves for the entire 10-season pre-war period of 1931-41. This clearly indicates that it would be unreasonable



able to expect production and fruit prices to remain long at their present high level.

Assuming the same income for management for the 13-year period as for the 1943-44 season, the return on the grove investment was \$38.11 per acre. Capitalizing this

percent. If no income should be designated for management, the entire net returns of \$98.11 would yield less than 5 percent on such a purchase price.

The prospective earning capacity per acre of citrus together with the income necessary to support the

sumers will be willing to pay less and less for citrus fruits. The conservative grove purchaser will consider the 13-year averages, or the averages for the 10-year period 1931-41, and plan on returns such as these, or perhaps less.

Should a grove owner rely upon

CHART I. RETURNS PER ACRE FOR MANAGEMENT AND INTEREST TOGETHER WITH CAPITALIZED VALUE AT 6%, FROM FLORIDA CITRUS GROVES, 1931-41

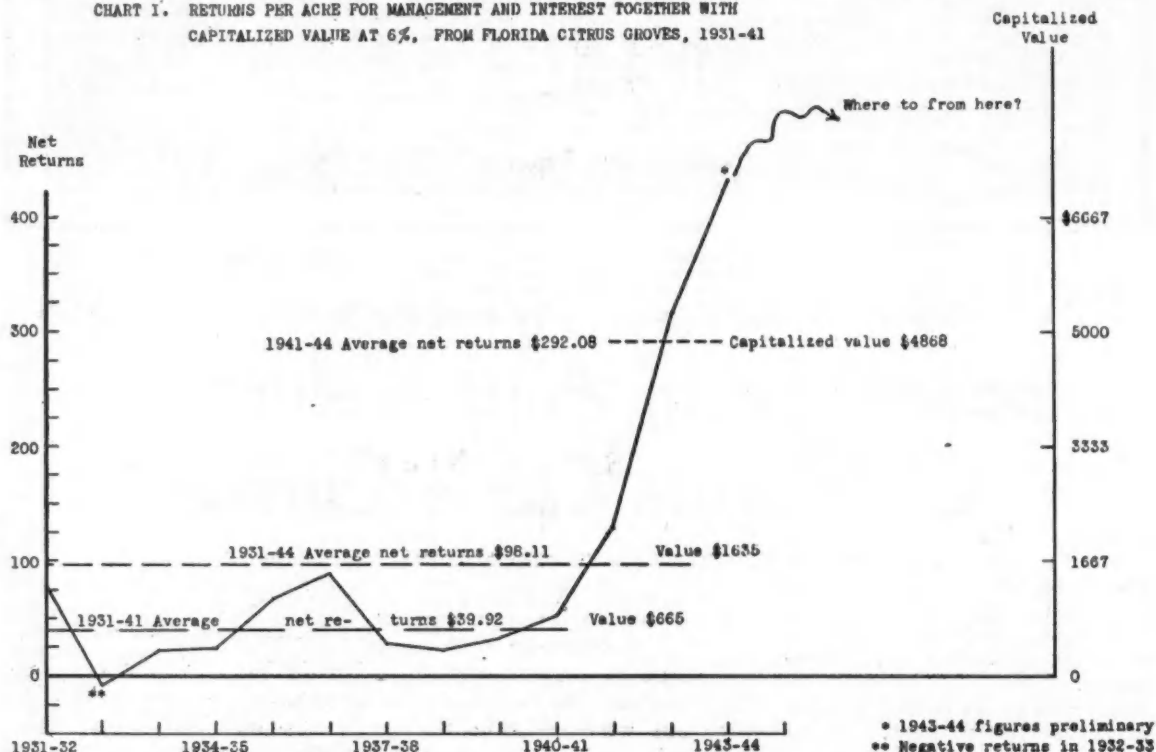


figure at 6 percent indicates a grove valuation of \$635 per acre. The estimated grove values as given by the growers for this 13-year period averaged \$545.

The average annual returns for management and interest were \$39.92 per acre for the 10-year period 1931-41. Capitalizing this figure at 6 percent the value is \$665 per acre. The net returns for the past three seasons, 1941-44, averaged \$292.08 per acre. This figure capitalized at 6 percent indicates a valuation of \$4868 per acre.

The above figures clearly indicate the folly of attempting to arrive at grove valuations from the returns over a short period of time when so many factors are favorable to high returns. If high fruit prices and good production should continue long enough for the grove purchaser to pay for a grove at the rate of \$2,000 per acre, or should he pay cash for it in the first place, the 13-year average returns of \$38.11 on the grove investment would amount to the rate of less than 2

growing and his family determines the number of acres needed for their support. The expected large increases of citrus fruit production

TABLE II—Wide variations in net returns and capitalized value of Citrus Groves between long and short periods.

Period	Seasons	Net Returns per acre-	Value per acre as determined by capitalizing net returns at 6%
Pre-war 1931-41	10	39.92	665
Pre-war and war 1931-44	13	98.11	1635
War 1941-44	3	292.80	4868
War 1943-44 -2/	1	432.69	7212
Post-war	?	?	-

throughout the country should materially affect returns to growers. With the decline of national income from the present high level, con-

citrus for his entire income and a \$2,500 annual income was necessary to support himself and family, it would require 62.6 acres of citrus at the production and income rate of the 1931-41 period, or \$39.92 per acre for capital and management. At the 13-year rate of production and income, \$98.11 per acre, 25.5 acres would be necessary.

Prospective purchasers of groves during inflated price periods would do well to take the above facts and figures into consideration. (See Table II). It would also be wise to get the production record in boxes of fruit harvested annually, production costs, and returns over a period of several years when contemplating the purchase of a particular grove. Such figures will reveal conditions that would be overlooked when only recent records were examined.

BUY UNITED STATES WAR BONDS AND STAMPS



## Some Seasonal Citrus Pointers

R. E. NORRIS

LAKE COUNTY AGRICULTURAL  
AGENT

This season is an early one. The picking season will be over considerably earlier than usual this year and citrus trees are more advanced than normal for this time of year. Trees put out an early growth and bloom buds made their appearance in a good many varieties during the last days of January. This abnormal situation came as a result of a rather mild winter, although the heavy and early bloom was probably induced by the hurricane more than any other one factor. It remains to be seen just how well this bloom will stick, but because of the splendid condition groves have been in generally in recent years and in view of the splendid recovery they have made since the storm it now appears that a big crop is in prospect for the 1945-46 season. A severe cold or some other misfortune could change the picture, but generally the passing of February means the passing of the damaging cold weather.

If the spring fertilizer has not already been applied it should be put on soon and disced in. A discing now will not only incorporate the fertilizer into the soil but will help to conserve moisture during this dry part of the year. There are several approved fertilizer grades that may be used at this time of year. Among the most widely used are the 4-6-8 and 6-4-8 mixtures and a top dresser analyzing 8-0-8. These grades should carry ample amounts of the secondary plant foods, especially magnesium, manganese and copper. In some instances nitrate of soda potash is being used. Where this is used the secondaries should be made up in the next regular fertilizer application since this material does not contain sufficient quantities of the secondary plant foods.

Where the dormant lime-sulfur spray with zinc was used earlier in the season there is not much doubt but what rust mites are in check. The same is probably true in those groves where an early nutritional spray was used following severe hurricane damage in the grove since such sprays general-

ly carry eight to ten pounds of wettable sulfur to the hundred gallons. However, where no early sprays were used frequent inspections for rust mites should be made in blocks of Valencias and other fruit that has not yet been picked. If rust

mites show up they should be dusted.

Melanose infection is expected to be heavy this year as the result of large amounts of dead wood following the hurricane. The mel-

(Continued on page 10)

## SUMMER FERTILIZER

must do these three important jobs!

1. Keep the trees healthy over the long hot summer.
2. Mature and size the fruit.
3. Enable the trees to store bloom wood for next season's crop.

For best results, your fertilizer should run high in organic content. NACO Brand Fertilizer contains the finest available organics and the famous NACO 5 Star Brands also contain the minor elements\* so vital to tree health.

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VOLCK OILS,  
fungicides and in-  
secticides for your  
spray and dusting  
needs.

\* Zinc, Iron, Manganese, Magnesium,  
Copper, Plus Borax

# NACO FERTILIZER COMPANY

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# Post-War Use Of Government Nitrogen Plants . . .

On September 12, 1944, Secretary of Agriculture Claude R. Wickard released a report prepared by an inter-bureau committee on post-war problems, entitled "The Utilization of Government Synthetic Ammonia Plants for Fertilizer Production."

In his judgment, Secretary Wickard said, the committee's recommendations represented sound public policy and "their adoption would help to assure farmers enough nitrogen fertilizer to meet their demands at reasonable prices after the war." From this, people probably would infer that wartime prices, even pre-war prices, of nitrogen fertilizers were not reasonable.

Inorganic materials constitute the nitrogen foundation of the present fertilizer industry. Organics, while very important for certain crops and conditions, now are used only to a slight extent. They are in such demand for feed that normally, the fertilizer market cannot compete for them.

To help clarify the question of prices, we have compared, in the table below, the price record of some important fertilizer materials, using the year 1922 to represent price conditions as stabilized by normal economic factors following the wide fluctuations due to World War I, and the years 1940, 1942, and 1944 (September) to reflect price conditions in World War II.

Year	Nitrate or Soda	Sulphate of Ammonia	Super-Phosphate	Muriate of Potash	Cotton-seed meal	Tankage
(Prices in dollars per unit of 20 pounds plant food content)						
1922	3.04	2.58	.566	.632	4.66	4.75
1940	1.69	1.36	.516	.517	4.64	3.33
1942	1.74	1.41	.600	.522	6.11	5.04
1944 (Sept.)	1.75	1.42	.640	.503	7.81	4.86

Despite price ceilings and other measures intended to adjust prices to values and to prevent harmful inflation, commodity prices, particularly prices of farm commodities, have risen. This is not said in criticism. Over the decades, farm commodities have been exposed to the economic winds of the universe, while manufactured commodities, frequently have been protected by tariffs and similar devices. Tariff protection is not provided by statute

CHARLES J. BRAND

Executive Secretary National Fertilizer Association, in February issue "Farm For Victory," Publication of Chilean Nitrate Educational Bureau

for any fertilizer or fertilizer material. The chemical fertilizer industry has been growing in the United States for over a century, and rarely has any protection been afforded.

For further clarification, the prices of selected farm commodities are cited for the same years as in the table above. A comparison of the two sets of prices will readily reveal the reasonableness of current fertilizer material prices in contrast with farm commodity prices.

These crops account for 81 percent of the total consumption of fertilizer nitrogen in the United States. Prices of vegetables, fruits and nuts are not readily available for purposes of comparison.

The inter-bureau committee's report presents the conclusion that there is likely to be a great and sustained increase in the demand for fixed nitrogen by agriculture and industry after the war. A realistic analysis of the agricultural history of the past 30 years bids for caution in accepting this conclusion unreservedly. On the basis of certain assumptions as to employment, national production, price levels, and fertilizer prices, the committee estimates:

1. Under conditions unfavorable

Year	Corn per bu.	Cotton per lb.	Wheat per bu.	Potatoes per bu.	Tobacco per lb.
1922	58.5	18.9	103.2	96.7	22.8
1940	59.0	9.6	.73	70.7	15.1
1942	79.5	18.51	101.8	110.0	28.3
1944 (Sept.)	116.0	21.02	135.0	147.0	42.9

The level of farm prices now is high, both with reference to the commodities themselves and in comparison with fertilizer prices. It is as stimulating to the purchase of fertilizer as one could reasonably

to agriculture, a farm cash income of \$10,300,000,000 and nitrogen consumption of 500,000 tons.

2. Under moderately favorable conditions, a farm cash income of \$14,600,000,000 and nitrogen consumption of 750,000 tons.

3. Under most favorable conditions for agriculture, a farm cash income of \$18,000,000,000 and nitrogen consumption of 900,000 tons.

The average farm cash income for the 10-year period 1935-1944, with its five years of World War, was less than \$11,900,000,000. Average annual consumption of chemical nitrogen for this decade was approximately 375,000 tons.

Even the lowest of these farm cash income figures, \$10,300,000,000 seems rather high for anything like average conditions in post-war America. However, the advantageous agricultural price levels that have prevailed for the past four years have improved the farmer's capitol position tremendously. He could, if he wished, use some of his capital to buy facilities to enable him to meet

expect any price level to be.

The five crops listed in the tabulation account for approximately 60 percent of the total yearly consumption of all commercial fertilizers used in the United States as follows: corn, 22 percent; cotton, 15; wheat, 9; potatoes, 7; and tobacco, 6. With respect to nitrogen consumption, the order is as follows: corn, 19.4 percent; cotton, 19; vegetables, 13.9; fruits and nuts, 12.4; potatoes, 7.5; tobacco, 4.6; and wheat, 4.2.

some of his inevitable post-war difficulties. Experience does not indicate he will go far in this however. Last year's income usually determines this year's purchasing on the farm. The farmer is likely to conserve his capital, especially in a period of falling prices.

In the good old days of 1925-29, cash farm income averaged \$10,-894,000,000 a year. Not once in the 11 years, 1930-40 inclusive, did the figure reach \$10,000,000,000 again. The depression low of \$4,-606,000,000 occurred in 1932, and the peak for the 11 years (\$9,123,-000,000) occurred in 1940 when we were already feeling the effects of World War II although not yet as participants. Consumption of chemical nitrogen fell below 163,000 tons in 1932, dropping from 317,000 tons in 1930.

In 1941, when war's tremendous demands for increased food, feed, and fiber production really began to make themselves felt, total cash income of American agriculture, including Government's payments, was \$11,743,000,000. That figure is certainly comparable to the \$10,300,-000,000 which is designated "unfavorable" in the committee's appraisal of post-war demand for nitrogen, and which it estimates would correspond to consumption of 500,-000 tons. Actual consumption of nitrogen in 1941 was 453,500 tons, including 48,000 organic, and the average for the three years 1941-43 was 454,000 tons, including 42,-700 organic. Average farm cash income for those same years was \$15,895,000,000, exceeding the "moderately favorable" estimates of \$14,600,000,000 by \$1,295,000,000.

Farm cash income for 1943 and 1944 approximated \$19,750,000,000 and \$20,800,000,000 respectively. These figures exceed the committee's "most favorable" income figure of \$18,000,000,000. Fertilizer nitrogen consumption under "most favorable" conditions is estimated at 900,000 tons. In 1943, agriculture used 500,000 tons of nitrogen, and in 1944 about 600,000 tons.

No doubt the committee made its estimates very carefully. Judging from past experience, however, it appears to have assumed conditions much more favorable than are likely to exist. Even the conditions assumed as "moderately favorable," which contemplate an agricultural cash income of \$14,600,000,000 and a nitrogen consumption of 750,000 tons, seem over-optimistic.

(Continued on page 20)



**OVID**  
said it ....

*"A field becomes exhausted  
by constant tillage."*

WAY, WAY BACK about 17 A. D., Ovid — a poet and philosopher — realized that Roman fields lost their productiveness when they were constantly tilled.

OVID PROBABLY DIDN'T KNOW why the crops became poorer and poorer. Nor did he dream that many centuries later man would develop fertilizers to replace the essential plant foods which are depleted by constant farming.

HOWEVER, TODAY'S Florida farmers and growers know about plant foods. They know that they most apply fertilizers regularly if their fields are to continue to produce high-quality crops. Furthermore, successful Florida farmers know that they get better results with Gulf Fertilizers because Gulf Brands restore the deficiencies of Florida soils and replace the plant foods lost by previous tillage.

YES, GULF FERTILIZERS are keyed to Florida soils, and Gulf Field Men are thoroughly trained to help farmers and growers determine the right cultural program for their individual needs.

TO PRODUCE A RECORD CROP from every row every year, use Gulf Fertilizers and Gulf Field Service.

For Everything that  
Grows in Florida...use

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The Gulf Fertilizer Company

Tampa and Port Everglades, Florida





## SOME SEASONAL

## CITRUS POINTERS

(Continued from page 7)

nose spray will be particularly important this year in groves where hurricane damage was severe as well as in other groves where dead wood occurs and in seedlings. This spray should be applied two to three weeks after the petals fall. A 3-3-100 Bordeaux to which five to ten pounds of wettable sulfur is recommended. If purple mites or six spotted mites are numerous when the melanose spray is applied a neutral copper should be used, to which is added five to ten pounds of wettable sulfur and 2/3 pound of DN to the hundred gallons. When DN is used its effectiveness is seriously impaired in the presence of lime. Therefore, neutral copper and no lime as a neutralizing agent should be used.

Frequent inspections should be made for aphids in the grove. This pest is particularly harmful on young trees, older trees that are slow in growing or sparse of foliage as is the case with trees in many groves in the path of the hurricane. If the infestations are not checked in January or February and they require control, it is recommended that a 3 percent nicotine-lime dust be used or add one pound of nicotine sulphate per 100 gallons of any spray that is used in the grove at this time.

Banks from around young trees should be removed soon if it has not already been done. They should not be removed too early, but they are of no help to the young trees after the danger of cold is over.

Rootstock sprouts should be removed as should dead wood. Under present conditions, while labor is scarce, this is one job that is usually done at a time when labor can be spared from other more pressing jobs.

Wartime labor shortages will continue to complicate citrus grove operations during the present year, at least. While the timing of certain grove operations is very important, there are other jobs that can be done with reasonable success at several different times. The small grower who does his own work can continue on his regular schedule without much trouble, but grove caretakers and those responsible for large operations are finding it difficult to keep on a strict schedule. Most of these operators "put first things first" and do the important

job on schedule and let those that can wait do so. Their judgment must be good because our production continues to go up, quality generally remains good, and labor becomes more scarce.

## SIX FLORIDA FOOD

## PROCESSING PLANTS

## EARN "A" AWARDS

Six Florida food processing plants will be presented with War Food Administration achievement "A" awards at ceremonies being arranged for individual plants.

The awards are being made to the following plants in recognition of outstanding performance in the processing of food: The Hills Brothers Company, Bartow; The William P. McDonald Corporation, Auburndale; Dr. P. Phillips Canning Co., Orlando; Plymouth Citrus Growers Association, Plymouth, Polk

Packing Association, Winter Haven; and Sotkely Foods, Inc., Tampa.

BUY UNITED STATES WAR  
BONDS AND STAMPS

MAINTAINING  
OUR SERVICE

at pre-war level and giving 100 per cent cooperation to our government — is our war-time aim — We appreciate the loyalty and cooperation of our subscribers in 27 Florida communities.

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Your citrus crops will come smiling through under the protection of these two new 90% oil spray emulsions. They are tried and proven in control of scale, white fly and certain mites. They aid in the removal of sooty mold.

*Volck 90*

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**VOLCK 90 OIL SPRAY EMULSION** is the successor to Florida Volck which has served you for many seasons. This improved oil emulsion will give you even better service.

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# Our Production Keeps Climbing!

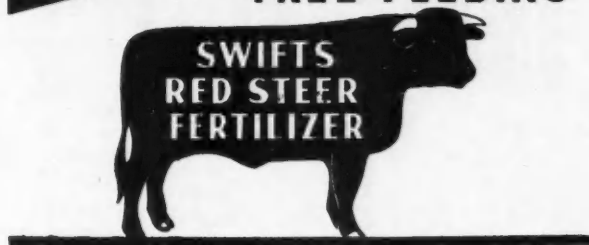
The day is coming when plant food supplies will be easier to get. We can't name the day but we do see signs that indicate it won't be too long.

And speaking of signs . . . look for the one that marks groves as being operated under the **SWIFT PROGRAM FOR CONTROLLED TREE FEEDING**. Watch these groves grow more luxuriant . . . more productive . . . and more profitable. Florida growers who have watched the Swift Program For Controlled Tree Feeding in operation have marvelled at seeing run-down groves reach top production — and top profits. And the Swift Program keeps them there, too!

There is satisfaction in knowing that some day this same profit making program can be adapted to the exact needs of all of your groves.

**THIS GROVE REGULARLY  
INSPECTED & SERVICED  
UNDER THE**

**Swift Program**  
for CONTROLLED  
**TREE FEEDING**



**Swift & Company, Plant Food Division**  
Bartow, Florida





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## '44 Farm Accidents In Florida Decrease Against '43 Record

The Florida Safety Council has just concluded its 1944 survey of "Farm Accidents," which shows a decrease of over 200 accidents, as against the 1943 record.

Cooperating with the Council in its "Safety On The Farm" program was practically every farm agency in Florida; the FF Clubs, 4-H Clubs, Florida Extension Service, Department of Agriculture Inspectors, Vocational Teachers, the Press, and others.

324 Accidents and injuries were accounted for by cuts with sharp instruments.

172 Sprains caused by improper lifting.

332 Eye injuries.

339 Accidents involved falls.

101 Accidents due to improper handling of farm machinery.

56 Accidents from falling animals.

128 Injuries from burns.

144 Injuries from makeshift ladders.

328 Injuries from improper use of hand tools.

159 Injuries from improper use of electricity.

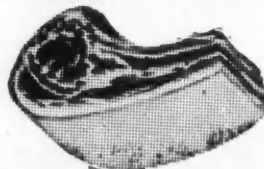
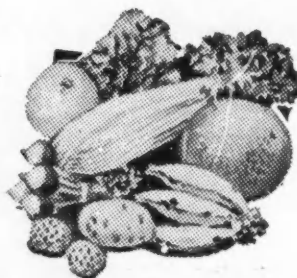
44 Persons lost their lives on the farm. This shows a saving of 7 lives on the farm, as against 51 in 1943.

The intensive "Safety On The Farm" program, conducted last summer throughout the state, in which all agencies participated, is reflected in the reduction of accidents, as well as the saving of lives, for which Florida was complimented, nationally.

The farmers, realizing the shortness of doctors, and also, with the shortness of help, are doing everything to protect their families, the workers, and their equipment, are becoming their own safety engineers, and are learning First Aid.

### GOOD MANGO PROSPECTS IN PALM BEACH COUNTY

Prospects for this year's mango crop in Palm Beach County are good at this time, with the trees in good condition and many young fruit being set, according to County Agent M. U. Mounts.



## THESE COMMODITIES

Are Becoming  
More And More  
Difficult  
To Obtain  
And Service Men's  
Needs  
And Civilian  
Requirements  
Demand  
The Full Cooperation  
Of Florida Growers  
In Increasing  
Food Production

We Are Prepared To Assist  
In That Essential Program  
In The X-CEL Manner . . .

**X-CEL FERTILIZERS**  
**X-CEL SEEDS**  
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Our Products Are of Outstanding Quality

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## Horticultural Protection Service Ends Tenth Season...

LEONARD G. PARDUE

Meteorologist  
Lakeland, Florida

The Federal-State Horticultural Protection Service is concluding its tenth season of activity in the interests of the growers of Florida. Supported jointly by the Agricultural Experiment Stations of the University of Florida and the United States Weather Bureau, this organization was established in 1935 as the result of a widespread popular demand for more detailed weather forecasts, tailored to the particular needs of Florida agriculture. During the first two seasons its activity covered the central sections of the state, being expanded in 1937 to include all winter-farming regions of the peninsula.

The Lakeland state headquarters office, under the direction of Meteorologist Warren O. Johnson, is staffed with four employees for forecasting, map and chart work, and administrative duties. Eight field meteorologists are stationed during the winter months at district headquarters as follows: Gainesville, Clarence E. Skillman; Deland, Rollo H. Dean; Orlando, Ray T. Sherouse; Winter Haven, Oscar N. Norman; Bartow, Leonard G. Pardue; Bradenton, Bernard H. Moore; Belle Glade, James W. Milligan; Fort Lauderdale, Arthur F. Folford, jr. Following the close of the season all will assemble for the preparation of annual reports and for seminars and discussions of the ever-changing problems and requests for assistance received from agricultural interests. Upon the conclusion of the period of duty in Lakeland the field meteorologists will be detailed to various coastal stations in Florida, Alabama, and Texas for summer duty in the hurricane warning network.

### The Season's Weather

The 1944-45 season was marked by three salient meteorological occurrences: the hurricane of October 19, the freeze period of December 12-15, and the freeze of February 2. In addition, the protracted period of warm, dry weather commencing in February is noteworthy.

The hurricane formed in the western Caribbean sea on October 12, pursued a slow, erratic path for several days thereafter, increased speed and set a course for the Florida mainland on the 16th, crossed Cuba slightly west of Havana early on the 18th, and began to affect southern Florida that day. It reached the coast line near Sarasota about dawn on October 19, traversing the state to a point near Jacksonville by the middle of the afternoon. Lowest barometric pressures along the path averaged approximately 28.50 inches near Tampa, gradually rising to about 29.00 inches near Jacksonville as the storm lost intensity and passed out to sea. Most of the peninsula to the east of the path experienced winds of hurricane force

—75 miles per hour—and at Dry Tortugas the velocity reached 120 mph accompanied by a pressure of 28.02 inches.

Damage to citrus was heavy. While no attempt will be made here to

assess the loss either of fruit or of trees, it can be said that tens of thousands of trees were blown down and millions of boxes of fruit ruined. A great majority of trees near the storm path suffered severe defoliation on the southeast, or windward side. According to the Red Cross a total of eighteen lives were lost, ten of these being marine casualties and the remainder occurring on land.

The freeze of mid-December  
(Continued on page 22)

## Neither Too Large Nor Too Small.....

In fact many of our customers tell us that our company is just the right size to give them the personalized service and careful attention they need in the operation of their grove production program.

For years hundreds of growers in the heart of Florida's citrus belt have found our FFFertilizers invariably of high quality, producing results which they have found satisfying.

### It Is Time

To be thinking about your summer application, bearing in mind that as always in the past we are in position to deliver to your grove the fine, well-balanced FFFertilizer which your particular grove requires to maintain the greatest efficiency in production.

Let one of our Field Service Men consult with you about FFFertilizer

**Florida Favorite**  
**FERTILIZER COMPANY**

Old Tampa Road

Lakeland, Florida



# The LYONIZER

Department

COMPILED BY THE LYONS FERTILIZER CO.

## Reports Of Our Field Men . . .

### WEST CENTRAL FLORIDA E. A. (Mac) McCartney

We had a very fine bloom throughout this section this spring and everyone was anticipating a bumper crop for the coming season, but as the old saying oes: "There is many a slip between the cup and the lip". Well, at this writing we are having one of the "slips" in the form of dry weather, and those groves that are not equipped with irrigation are suffering very badly. The tangerine deal is over in Hernando county. They had the largest yield in the history of the county and shipped well over 100,000 boxes of tangerines. We will get started with our summer application of fertilizer during the month of April and without exception will use a well-balanced fertilizer containing a complete range of secondaries.

### HILLSBOROUGH & PINELLAS COUNTIES C. S. (Charlie) Little

It now appears that this spring will be a repetition of the one we had last year as far as dry weather is concerned. It is getting very severe in most sections and every grower who has an irrigation system has it going full force. Along with the dry weather we have an infestation of purple mites and where it is possible we are spraying to get this situation under control. Valencias are being moved very slowly from this section, but we expect to see movement greatly accelerated within the next few days as most growers are anxious to have them moved from the trees. We still have a limited amount of marsh seedless grapefruit that is now being moved to market. Our bloom this spring was very heavy but due to the dry weather the petal drop was rapid and it is questionable as to the crop set that we will eventually have on our trees.

### POLK COUNTY J. M. (Jim) Sample

We are in the middle of a very severe drought at this time

(March 20th) and where it is possible for the grower to irrigate he is working overtime. It is still somewhat of a question as to just how much of our new crop of fruit will be lost, but unquestionably this loss will be heavy in some groves. The dry weather is also a distinct handicap in the spray program, and with mites very active in some sections the situation might be called grave. Where it is impossible for growers to spray they are using a D. N. sulphur dust to control the various mites. The Valencia market is good at both the canning plant and the packing house, and it now appears that the entire crop will be moved somewhat earlier this year than for the past few years. If we get a rain soon the summer application of fertilizer will get under way during April.

### NORTH CENTRAL FLORIDA V. E. (Val) Bourland

The Valencia crop is being rapidly moved from the trees and if this movement continues at the present rate our season will be over much earlier than in former years. We had a very heavy bouquet bloom this spring and the dry weather is causing a heavy droppage of young fruit. It has been our experience that

it is hard to set the type of bloom we had this spring even under favorable conditions, so it is now a little alarming to have such dry weather at this critical time. The watermelon crop is looking good at this time but they are beginning to need rain very badly to develop the vines for a good crop. The vegetable crops in the vicinity of Winter Garden and also on the muck at Zellwood are looking good and growers feel optimistic about their returns.

### SOUTHWEST FLORIDA F. W. (Felton) Scott

The vegetable crops all through this section are growing fast and we could well stand weather of lower temperatures but as a whole all crops are looking good and should make good yields. Tomatoes will start moving to the market about the first of April and growers are hoping that prices will react in their favor before heavy movement is under way. The extremely dry weather is playing havoc with the new citrus crop. We have heavy infestations of mites throughout the territory and most growers are busy watering a grove then following with the spray machine. There are very few crops of Valencias left and what few are left are being rapidly moved to market. Prices have been good from both the canners and packers.

Due to the serious labor and transportation difficulties you can assure yourself of fertilizer when you need it and at the same time be of considerable help to us if you could store a part of your fertilizer requirements at this time. Thanks.

## ADVERTISEMENT—LYONS FERTILIZER COMPANY



Well, folks, it's just about time to start with that summer fertilizer application again. And they's one thing sure—if you want your trees to feed you, you got to feed them. And after the good season which most folks had the trees ought to get a plumb ample supply of ALL the plant foods they can possibly need this trip. In fact it's got to be done that way if you want the trees to put on a fine crop of foliage and hold a good crop of fruit. Fellers that know tell me that this summer you'll need nitrogen, phosphoric acid and potash as well as plenty of magnesium, manganese and copper, to say nothin' of a lot of other less essential elements.

The vegetable growers has been sort of catchin' the short end of the deal here lately, what with the weather and low prices knockin' holes in any chance of profit the grower had. Right now though it looks as if the deal might be somewhat better. Prices has perked up quite a bit and a lot of growers has diversified their crops so that they ain't goin' to have all their eggs in one basket. Lake section crops shore look good and with crops movin' at their best durin' April looks like the boys stand a chance of gittin' well. In a lot of spots plantin' has been held down 'cause the growers didn't know what they was goin' to be able to git for their crops.

This here Floridy Farm bureau looks to us like it has plenty of stuff on the ball. Right now they're huntin' for 6,000 members in Floridy and our guess is they'll make it. Everyone who has any interest in agricultural producin' is invited to join and since the idea is fer everyone to cooperate with everyone else fer the betterment of their industry now and after the war, and fer protectin' themselves against adverse interests, we're sure goin' to join—and go to the meetin's too just like you ought to do.

They's a lot of interestin' readin' in the Floridy Horticultural Society Proceedin's book of the 1944 meetin'—even if you was there and heard the talks we'll bet you can learn sumpin by readin' the Proceedin's book.

Fertilizin' pastures for growin' better cattle is all the rage right now—and with the cattle business becomin' one of the very big businesses of the state, you'd better start and keep up with the big growers who are fertilizin' their pastures to raise more and better meat.

**Uncle Bill**

## Keeping Farm Machinery In The Fight....

FRAZIER ROGERS

Professor Of Agricultural Engineering,  
University Of Florida

With the biggest job of food production in history facing him, the farmer of today must keep his equipment in tiptop shape and operate it efficiently to meet his production goals. Labor and machinery shortages make it doubly imperative that better care be given equipment now in service. Study your machines, their repair, and adjustments so that a better job of crop production may be had, thereby saving time and money.

Too often we discard the instruction books that are furnished by the manufacturers before we know our machines. These books are valuable and should be kept so that they can be of assistance to you when your machine fails to function properly. You pay for them when you buy your machinery so why not get the full value of your purchase by taking advantage of the knowledge of those who know the machine best. Many are the adjustments that are provided for machinery by the manufacturer that are never made use of by the operator.

While there is no magic formula that will make machinery operate better and last longer there are a few simple rules that if complied with rigidly will certainly work like magic in the performance of your equipment. Let me list a few of these for you at this time.

**First**, make sure that your machines are properly set up by following carefully the instructions and diagrams that came with it. Don't handicap it from the very beginning by improper assemblage.

**Second**, periodic inspections while the equipment is in operation. Are some parts wearing excessively due to poor adjustment? Make the necessary adjustments before serious damage results.

**Third**, have your equipment in repair and ready to start the season in number one condition. Did you at the close of last season list all of the repairs needed on each piece of equipment and attach this list to it? If so now is the time to have the replacement parts on hand and make the needed repairs. Remember the old adage, "A stitch in time saves nine." It is just as true today

as it was the day it was first spoken. Little repairs neglected today become big repairs and breakdowns tomorrow. This may result in long delays, for your dealer may not have on hand the necessary replacement parts and will have to send away for them. This could be your planter and the time for planting swiftly passes.

**Fourth**, keep your machinery clean and painted. This will not only add to the years of usefulness but the appearance as well. The metal parts will not rust if covered with a coat of paint and the wooden parts will not rot if decaying organisms and moisture are kept out of the wood by a protective coating of good paint. Use a high grade machinery paint as this adheres to the metal much better than ordinary house paint. Your dealer usually has paints of the original colors of your machinery.

**Fifth**, protect your equipment from the weather. It has been the

observation of many that too often the depreciation of farm machinery is more rapid due to exposure than to use. This does not take into account the vast amount of time that is wasted each year repairing damage to a piece of machinery resulting from its exposure to the weather for long periods of time while not in use. The loss in crop production on account of not being able to perform the farm operations on time is a factor well worth considering the advisability of housing farm equipment.

Last but not least of the items on the list is lubrication. From the standpoint of importance, it should probably have been number one. Friction is that ever present enemy that is seeking to cost you money in a number of ways. By producing excessive wear when two moving surfaces come in contact with each other without the benefit of a film between them, many dollars are contributed to the friction account each year. Too, the power required to operate this machinery is greatly increased when not properly lubricated. Your machinery instruction book should here again come in handy.

There's

"SWEET  
MAGIC"

IN DOLOMITE



● When you sweeten your grove soils with **DOLOMITE** you sweeten your profits, too, because **DOLOMITE** not only releases "acid-locked" plant foods but also supplies the calcium and magnesium that are essential to tree health and high quality fruit of finer flavor. Make your annual application now and assure better fruit and higher profits





One of the Earth's

# Natural Treasures...

**Chilean Nitrate Ranks with  
Gold, Oil, and Other Substances,  
In Value to Mankind**



Huge electric shovels—made in the U. S. A.—rip natural nitrate ore from the earth in Chile. This is the raw "caliche" just as Nature created it.

**Y**ou think of Natural Chilean Nitrate of Soda as a granulated substance, bagged for easy handling, to help you make better crops.

Right... but this is a picture of the finished product. Behind it there are dramatic pictures of production.

Like other natural treasures of the earth, Chilean Nitrate is mined, refined and processed before it is ready to use. The supply of this natural treasure is virtually unlimited. Beds already known contain enough nitrate ore to last for hundreds of years.

Men who produce nitrate are a hardy lot. They live and work in areas where almost

nothing grows and it practically never rains. Many of the engineers and executives are American. Most of their machinery is, too.

Today Chilean Nitrate is so finely processed, thanks to new plants and methods, that it is shipped in bulk from Chile, bagged at American ports. Because of its natural origin, Chilean Nitrate contains, in addition to large proportions of nitrogen and sodium, small amounts of boron, iodine, manganese, copper—34 elements in all—many of which are known to be essential to healthy plant growth.

Chilean Nitrate is ideally suited to meet your requirements. It is the safe, sure and satisfactory nitrate for use on *your* crops.

## **Easy to Handle... Easy to Use**

Natural Chilean Nitrate comes in two forms—Champion brand and Old Style. It reaches you in fine mechanical condition, in even-weight bags, for easy storage and handling.

*Natural*  
**CHILEAN NITRATE**  
*of SODA*



# POST-WAR USE OF GOVERNMENT NITROGEN PLANTS

(Continued from page 9)

According to the committee, "If nitrogen consumption increases to 1,000,000 or 1,200,000 tons, domestic production should be greatly increased." It would seem that with agricultural consumption less than 600,000 tons now, estimates of almost twice that quantity may well await future developments and need not be made the basis of recommendations for retaining a substantial over-capacity to produce fixed nitrogen in the United States. Such over-capacity would hang like the sword of Damocles over the private inorganic nitrogen industry and that is said in full recognition that during some war years, overall consumption of fertilizer nitrogen would probably have been somewhat greater had more of it been available.

There has been an enormous growth in nitrogen capacity in the United States during the past four years, most of it in Government-owned war plants. These have been financed with Federal funds, built by private contractors, and usually are operated for Government account by experienced private corporations engaged in many kinds of chemical manufacture for munitions purposes. So many varying conditions affect both capacity and consumption that figures must be used discreetly and with the realization that perfect statistics are nowhere available. Unforeseen and unforeseeable factors may upset any situation.

The table at the top of the next column is a reasonably correct indication of national capacity. Private enterprise is prepared to furnish quantities of nitrogen as stated therein.

In addition to her cyanamid production, most of which is exported, Canada with relatively small nitrogen consumption has developed a considerable producing capacity presently devoted largely to war purposes but in peacetimes available for the United States market as is shown in the second table.

Chile's largest exports to this country occurred in 1918 and exceeded 1,845,000 tons containing 295,000 tons of N. Then, Chilean nitrate was almost the sole reliance of the Allied nations.

In considering the foregoing, it is important to remember that practically all of the warring nations, and some not at war, have been developing excess nitrogen capacity for munitions purposes. Much of this capacity will be seeking for-

Source	Tons N	
From by-product sulphate of ammonia, dependent upon the rate of operation of the steel industry	150,000 to	185,000
From imports of nitrate of soda from Chile	125,000 to	165,000
From imports of cyanamid from Canada	25,000 to	35,000
From private synthetic nitrogen capacity	500,000 to	700,000
From available organic nitrogen sources	30,000 to	70,000
	830,000 to 1,155,000	

To obtain total United States capacity add:		
From Government owned synthetic nitrogen plants	600,000 to	750,000
	1,430,000 to 1,905,000	

From private plants	80,000 to	92,000
From Government plants	120,000 to	136,000

Available supply from all above sources 1,630,000 to 2,133,000

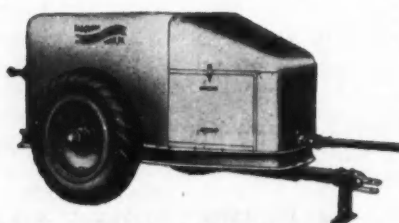
foreign markets in the post-war period, which may tend to affect gravely the competitive supply and price situations in the United States. In short, if we expect other people to do business with us, we shall have to do business with them.

According to the committee's statement, nitrogen consumption in the immediate pre-war period was as follows:

	Average	Maximum
	1936-40	1941
Agri. .... Tons N	389,840	453,500
Ind. .... Tons N	138,314	204,228
	528,154	657,728

Comparison of these figures, with those given above for production, shows that capacity is substantially more than double 1941 consumption.

There are nine Government-owned synthetic ammonia plants. Federal moneys invested in them exceeded \$200,000,000. They were built presumably for war purposes and should not be permitted to cripple or destroy the private nitrogen industry. After all, private enterprise here and in Europe conducted practically all of the research and developmental work that has produced this indispensable industry. It is



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- Power Take-Off Orchard Sprayer**
- More than 100 models assure you the EXACT Iron Age machine to do your spraying with ease, economy and thoroughness.
  - 7 Pump Sizes . . . the right pump for each sprayer.
  - 6 to 40 gals. a minute capacities to meet all requirements.



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HECTOR SUPPLY COMPANY, MIAMI, FLORIDA

bad enough to condone the destruction of war, but it would seem inexcusable to permit war-built plants to destroy the very system that has made this nation great.

There are about 12 privately-owned plants in the United States, three of which are very small. Of the other nine, the smallest produces only about 5,000 tons of nitrogen per annum. The largest privately-owned plant is also the largest of the American plants. Its production capacity, approximately a maximum of 265,000 tons a year, is greater than that of the largest Government plant, which has a maximum capacity of approximately 250,000 tons. Total investment in private plants no doubt greatly exceeds the Government's investment because private industry, being the pioneer, had to bear the expense of research, experimentation, and development necessary to build up a great industry.

Either private or Government capacity separately could provide all the nitrogen used in any year to date. Grave questions of policy as to both domestic economics and foreign trade, therefore, are involved in the problem of disposing of Government nitrogen plants.

The nitrogen situation is only one fraction of the general post-war farm production situation. It is vain to hope that farm price levels such as now exist will continue in peacetime. Likewise it is unlikely that production will sink to pre-war lows. Whether or not there is post-war agricultural depression, production will remain relatively high and shrink only gradually. Increased use of commercial plant foods, new and improved machinery, improved farm techniques, and improved crop varieties make this inevitable.

Farming is a relatively static industry and it is not possible to make quick changes. It is not like running a meat market. The market man can reduce his order to his wholesaler any morning. He may turn his stock over once a week. Not so with the farmer. His is a year-round industry. Turnovers in certain lines like livestock, fruit, etc., take years to complete. For the most part seed time and harvest come only once a year.

Nitrogen consumption estimates that ignore bearish factors are of doubtful usefulness. War-extended production will keep up and many of the same difficulties that were present after World War I will recur. Consumer nations will increase their own production as promptly as possible, and will again buy their

extra needs from their traditional suppliers. For example, Britain will again resume her commercial relations with Argentina and other supplying areas. Such relations are based on economic considerations that have real persuasive force. Consequently, our exports, especially of foods and certain other raw materials, will inevitably drop and surpluses such as burdened our agriculture throughout the 1930's will reappear. Even now we have more than a year's supply of cotton based on recent normal world demand.

Finally, lend-lease and other "give-away" methods can in the long run only impoverish our country, without ultimate benefit to the nations which are placed on false bases or, which, in some degree, are pauperized by such expedients. Business based on exigencies of international relief is not sound business for the permanent economic reconstruction of America, even if it could achieve the distribution of excessive amounts of nitrogen and the disposal of the resulting crops. The American taxpayers would unite in protest.

FOR EVERYTHING THAT GROWS ON EARTH

## High Grade TEXAS CALCINED MAGNESITE

Manufactured By J. J. Cates, Llano, Texas  
Home Office, Cates Building, Sanford, Fla.

A fertilizer material rich in Magnesium for grove, nursery and farm requirements. Contains an average of 80% Magnesium as Magnesium Oxide — **immediately active** and available for improving soil pH Value, correcting Magnesium Deficiency, and building up a Magnesium reserve in the soil.

### Your Fertilizer Manufacturer Will Supply TEXAS CALCINED MAGNESITE

in your favorite fertilizer brands at from 2 to 4 units for maintenance depending upon conditions, or will recommend **direct application** for correction of severe Magnesium Deficiency at a rate per acre to suit your particular condition.

### "BRONZING" (Magnesium Deficiency)

of citrus trees and the various symptoms of Magnesium Deficiency in vegetables indicate serious losses in production which you cannot afford to take. The use of **Texas Calcined Magnesite** will pay big dividends in healthy trees and plant condition, increased volume of production, and improved quality of fruits and vegetables.

### TEXAS CALCINED MAGNESITE

Sold By:

Lyons Fertilizer Company, Tampa, Florida  
Florida Favorite Fertilizer Company, Lakeland, Florida  
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Maxcy Fertilizers, Inc., Frostproof, Florida  
Wheeler Fertilizer Company, Oviedo, Florida  
Chase & Company, Sanford, Florida  
Citrus Culture Corporation, Mount Dora, Florida  
Plymouth Fertilizer Works, Plymouth, Florida  
Parrish Fertilizer & Manufacturing Co., Deland, Fla.  
Alvin H. Hinson, Plant City, Fla.

## HORTICULTURAL PROTECTION SERVICE ENDS 10TH SEASON

brought minimum temperatures in the low and middle 20's to the low-ground locations in the citrus belt, freezing many tangerines and damaging a considerable proportion of the Valencia crop. Much new growth had come out to replace that lost during the hurricane, and this tender foliage was destroyed in many places on December 15, the date of the lowest temperatures of the winter at most places.

The last cold weather of consequence occurred on February 2, when temperatures fell to the middle 20's; low-ground groves lost a sizable proportion of the second crop of new growth, put out following the December freeze, and small trees were killed in places. There was little or no additional damage to fruit.

Warm weather commenced in February, and from the middle of the month onward to March 21 minimum temperatures ranged mostly from 50° to 60° maximum temperatures for the period February 10-March 20 reached at least 80° every day but four, and 90° was recorded a number of times. Only about one-

## EDITORIAL (Continued from front cover)

percent from 1943, but the advance in citrus income more than made up for the decline in other farm products and put the gain for all such products at five percent over 1943.

Federal purchases, increased buying power and a general tendency toward increased consumption of citrus fruits are credited with the high price and record income enjoyed by Florida citrus growers.

third of an inch of rain fell in February, and March was entirely rainless at most places until the 21st, when rather general light showers fell. Widespread grove irrigation was the rule from February onward. The dry weather, combined with the hurricane and the two cold periods, had a cumulative effect, and in late March many groves showed more or less dead wood over the southeastern portion of the trees.

Although field work and the daily temperature bulletins are terminated at the end of March, forecasts of possible damaging temperatures will be issued whenever necessary in the spring season. It will be recalled that a heavy frost injured tender truck well into south Florida on April 6, 1944, and occurrences of critical temperatures even later are on record in the more northern portion of the peninsula.

### Forecast Record

About 80 forecast stations were in operation during the past season, and from this number the verification record of ten selected stations over the peninsula is shown in the table. For example, at Brooksville 95% of the forecasts were without error, 97% were accurate within one degree, and all were correct within five degrees, for the period through March 21, 1945.

### Error in Forecast, Degrees

	0	1	2	3	4	5
	%					
Ocala	94	98	99	99	100	
Hastings	97	97	97	99	99	100
Brooksville	95	97	97	99	99	100
Dr. Phillips	95	96	99	99	100	
Mammoth	95	95	95	97	99	
Bartow	95	96	99	99	100	
Tampa	95	95	96	98	99	100
Cocoa	96	99	100			
Belle Glade	99	99	99	99	99	100
Homestead	99	100				

### Annual Reports Available Soon

The annual reports contain records of the season's weather, including minimum temperatures and durations of low temperatures, comparative data for past winters, and other material of interest to farmers. These reports are distributed free of charge in April. Requests should be made to the Weather Bureau office, Box 1058, Lakeland, specifying the section of the state about which information is desired.

## CITRUS BLOOM HEAVY IN LAKE, BUT GROVES NEED MORE RAIN, AGENT SAYS

Lake county's citrus bloom this season was one of the heaviest in recent years, but growers fear that much fruit will drop unless good rains come soon, according to County Agent R. E. Norris. If the dry spell is broken in time and damaging cold weather does not develop late in the season, the prospect for next season's crop is very good.

## CLASSIFIED

## Advertisements

The rate for advertisements of this nature is only five cents per word for each insertion. You may count the number of words you have, multiply it by five, and you will have the cost of the advertisement for one insertion. Multiply this by the total number of insertions desired and you will have the total cost. This rate is so low that we cannot charge classified accounts, and would, therefore, appreciate a remittance with order. No advertisement accepted for less than 50 cents.

**PEACH TREES — IMPROVED JEWEL VARIETY.** Labor conditions will permit production of a limited number of these special Jewel peach trees sufficient for sale on reservation only. Reservations accepted in order received until June 1st for delivery January, 1946. Clay Hill Nurseries Co., P. O. Box 2880, Tampa, Florida.

**FOR SALE**—About 50 yards chicken fertilizer at \$4.50 per yard F. O. B. our farm. Snyder's Poultry Farm, Rte. 1, Summerfield, Fla. (Marion).

**FOR SALE** — 35,000 ft. 8-5/8" OD 21.31 L. W. Line Pipe in 40-ft. Lengths P. E. Beveled, used but in excellent condition.

**UTILITY & INDUSTRIAL SUPPLY COMPANY**  
921 East Michigan Ave. Jackson, Mich.

Will pay \$5.00 for a used Citrus BUDDING KNIFE in fair condition. Can also use badly worn budding knives if still serviceable for \$2.50. Will buy a number of "Rogue" citrus seedlings from nurserymen, 10 cents per seedling. Must be vigorous variant plants. Donald J. Nicholson, 1224 Palmer St., Orlando, Fla.

**CITRUS TREES**—Best quality usual varieties on sour orange or rough lemon stock. Robt. P. Thornton, c/o Clay Hill Nurseries Co., Box 2880, Tampa, Florida.

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